#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

#### SECTION 501.0 RESPONSIBILITIES OF THE OWNER TO THE A/E

The Owner, hereafter called the Agency in this chapter, shall be responsible for providing the following information/data to the A/E, if required, for the planning and design of the project. The information so furnished shall not relieve the A/E of the responsibility for evaluating the information provided and for notifying the Agency of any additional surveys, investigations, tests or other information required for the A/E to perform its services. If the Agency does not have this information, the Agency shall procure the information in accordance with published procurement procedures. Or, as an alternative, the Agency may request that the A/E obtain such information as an additional service and include compensation for this in the fee negotiations. The Agency shall include this information requirement in the RFP for A/E services.

#### The Agency shall:

- Provide the A/E with either the Capital Budget Request forms containing such information as required by the Department of Planning and Budget or with other material establishing the building space requirements, adjacencies, functional requirements, special systems and siting requirements. Provide a copy of the BCOM review comments, if any, and any other relevant information that will clearly inform the A/E of the scope of the project to be designed. The project scope shall not be modified or substantially altered without prior written approval of the Governor or his designee.
- Provide the A/E with a budget Design-not-to-exceed construction cost which shall not exceed the construction cost on the approved G.S. Form E&B CO-2 for the project.
- Set a schedule for planning and design of the project. The schedule shall allow reasonable times for review of the various phases by review agencies such as the Division of Engineering and Buildings, the Fire Marshal, the Art and Architectural Review Board, the Department of Historic Resources, the Department of Health, the Division of Soil and Water Conservation, etc. The schedule shall be developed in conjunction with the A/E but shall be based on the date the Agency has determined that the project needs to be placed under contract for construction. The schedule is considered an integral part of the project scope and shall be monitored for adherence. The Agency agrees to make every reasonable effort to assist the A/E in complying with the schedule.
- Provide the A/E with a survey of the site in the form of topographic maps or plats locating relevant existing buildings to scale and, where necessary, showing bench marks, grades, lines of streets, pavements, property lines, rights-of-way, restrictions, easements, other improvements and trees.
- Provide utility maps showing the location, size and elevation of all existing public and private utilities which might interfere with the project or to which the project might be connected.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- Provide location and dimensions of existing buildings. Where the interior arrangement, construction, or floor level of an existing building affects the plans for the project, the Agency shall furnish the A/E with the necessary information as to interior arrangement, including reasonably accurate record drawings (if available), construction system information, and floor levels.
- Provide a list of all-existing equipment, furniture, furnishings, apparatus, etc., to be used on the project, including all necessary characteristics required to coordinate the equipment in the project.
- Provide a budget cost estimate of any equipment that the A/E will be required to specify and include in the contract. The Agency shall provide an itemized list of such equipment, with the standards as to type, size, quality, etc., for the A/E's guidance in preparing the specifications for this equipment.
- 501.9 If the A/E determines that roof scans, structural, chemical, mechanical, asbestos, lead based paint, or geotechnical investigations including borings or load tests for soil bearing capacity, are necessary, the A/E shall inform the Agency of such requirements and the Agency shall secure such information. The A/E shall provide guidance and criteria to assist the Agency in obtaining these services.

Any geotechnical investigation shall include testing, analysis of test results and design recommendations based on preliminary design parameters furnished by the A/E (e.g. type of construction, estimated column loads, estimated wall footing loads, proposed floor elevations relative to existing grade, etc.). The cost of the testing, analysis and design recommendations shall be borne by the Agency. Preparing a scope of work and the preliminary design parameters to assist the Agency in securing the geotechnical services shall be part of the A/E's Basic Services.

- **501.10** Provide all legal advice relating to the design and construction phases of the project. This does not include legal services to or on behalf of the A/E relating to its services and obligations.
- 501.11 Obtain the services of a professional construction cost estimator when an independent detailed quantitative cost estimate is required by the **Manual** and/or the Bureau of Capital Outlay Management to validate other cost estimates or funding requests. This does not relieve the A/E of responsibility for providing the cost estimate required by the A/E Contract.
- Determine any specific development requirements of political subdivisions appropriate and consistent with state policy, opinions of the Attorney General, and existing statutes. (All request and/or requirements of a political subdivision, preferably over the signature of its chief administrative officer, shall be included in the schematic design so that any questions might be reconciled very early in the planning process.)

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- Pay the invoice cost of all sets of Plans and Specifications for the initial schematic, preliminary and working drawing submittals. Where the Agency determines that the submittals made by the A/E were deficient, the A/E may be required to reimburse the Agency for the cost of any resubmittals required for DEB/BCOM review.
- 501.14 Compensate the A/E for the additional services in the preparation or presentation of any submittals to secure approvals for environmental or other applicable special requirements such as air and noise pollution provisions of local, state or federal agencies or preparation of environmental impact statements. These additional services are apart from those normally required by the Building Committee, the Art and Architectural Review Board, State Fire Marshal, Division of Engineering and Buildings, Department of Health, Department of Environmental Quality, Department of Conservation and Recreation (Division of Soil and Water Conservation) and Department of Historic Resources as of the date of the Manual, including its latest revisions.
- 501.15 Compensate the A/E in accordance with the contract. The values of the various phases or parts of the contract amount shall be set out in the Contract and/or MOU. The MOU shall also establish whether partial or progress payments are to be made during any phase or part of the project.
- 501.16 Procedures for the A/E's submission of invoices for services, for payments by the Agency to the A/E and for payments by the A/E to its consultants, subcontractors, and suppliers are set forth in Chapter 3, Sections 315.0 and 316.0 of the Manual. Should the amount invoiced exceed the amount of fee earned in the opinion of the Agency, the Agency shall approve payment for that portion of the fee/invoice earned and the Agency shall notify the A/E in writing of the amount not approved and the reason therefore.
- The Agency does not have the authority to override the requirements of the **Manual**, the Budget, or the applicable codes and standards. Requests to deviate from or modify these requirements must be made by the Agency, in writing, with appropriate justification to BCOM. The Agency must receive written approval to make any such modification.

#### SECTION 502.0 QUALITY OF WORK

The A/E shall be responsible for the professional service, including the technical accuracy and coordination of all designs, drawings, specifications, cost estimates, and other work or materials provided. The project documents submitted by the A/E shall represent a reasonable, code compliant, and acceptable architectural and/or engineering solution based on the scope of work, "design-not-to-exceed" budget limitations and other constraints of the A/E's contract. All work must be in accordance with current criteria, guides, and specifications set forth in this **Manual**, and shall conform to good architectural and engineering practices. Workmanship shall be neat with all lines and lettering of uniform weight and clarity for complete legibility and satisfactory reproduction. All elements of the A/E's submittals shall be checked by professional personnel trained in that specific discipline. The A/E's submittal will be reviewed by the Bureau of Capital Outlay Management for

## CONSTRUCTION & PROFESSIONAL SERVICES MANUAL – 2004 CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES

compliance with VUSBC and this **Manual**'s project requirements and criteria. Errors and deficiencies shall be corrected by the A/E at no additional cost to the Commonwealth.

If the A/E or the Agency determines that a meeting with BCOM is necessary or would be beneficial to discuss or review the A/E's approach to designing the project, the A/E shall request the Agency to set up such a meeting with BCOM. Or the Agency, at its own discretion, may request such a meeting with BCOM with or without the A/E present. BCOM will make a reasonable effort to accommodate such requests, considering BCOM's workload at that particular time.

#### SECTION 503.0 STANDARDS FOR A/E SERVICES

Simply put, the A/E is hired to provide the knowledge, skills and abilities to convert the agency's functional, spatial, and aesthetic requirements for a project into a complete set of documents for bidding and construction and then to ascertain whether the project is constructed in conformance with those documents. The Basic Services normally provided by the A/E are generally described below and are more fully described in Chapter 8 (Project Design Standards and Requirements), Chapter 9 (Design and Procurement Criteria, Policies and Guidelines) and Chapter 10 (Construction Procurement and Administration) as being the responsibility of the A/E. The A/E shall adhere to the design policies outlined in Chapter 7 and Chapter 8 in developing the Project Design. The Agency may request a waiver of policy from the DEB Director for a specific project where technical requirements and life cycle cost considerations justify such a waiver.

The A/E must restrict itself to the authorized scope of work. Deviations from the authorized scope might include incorporating embellishments which increase the cost above programmed amounts for the project, or increase the building area or make major changes in construction criteria, including unauthorized buildings or areas in the project, selecting specific systems or equipment without economic or technical evaluation, or introducing special equipment. It is the A/E's contractual responsibility to design a facility that can be constructed within the "design-not-to-exceed" budget and which conforms with applicable codes and the technical criteria included and/or referenced in the **Manual**.

During the development of the project and through approval of preliminaries, the A/E may expect clarifications and refinements within the general scope of the project and shall make necessary adjustments accordingly. Generally, approval of the preliminary design based on incorporation of review comments and accepted Value Engineering (VE) recommendations will establish the requirements for development of the working drawings and final design of the project. Incorporating V/E recommendations justified on payback (which should have been evaluated during preliminary design preparation) and changes in functional layout to achieve greater efficiency or cost savings are considered within the scope of the Contract. Changes or modifications required to conform to *Code* requirements are also considered to be work within the scope of the Contract.

If changes in the scope of work are authorized, appropriate modifications to the A/E contract will be negotiated.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

The A/E shall be thoroughly familiar with the **Manual** and the definitions, scope of services, submittal requirements, technical criteria and standards, standard procedures, and standard forms required.

Public (Commonwealth of Virginia) work and private sector work differ in many respects, and the A/E must understand and take these differences into account as it carries out its basic services, particularly in preparing the construction contract documents. For example:

- (1) The Commonwealth cannot limit bidding to a selected list of contractors known to do good work. Unless contractors are prequalified for the project, any licensed contractor may bid. Since bidder's level of knowledge and experience is unknown, drawing and specification requirements must be clear and concise, and must clearly indicate the specific features or work to be provided. The A/E cannot assume that the bidder will include features not specifically called for, and **shall not** leave essential items to be "worked out in the field" or "worked out on the shop drawings."
- (2) Sections, details, and dimensions must be provided in sufficient quantity, clarity and detail to enable the bidder to understand what is expected, to make takeoffs of material types and quantities, and, once hired, to prepare shop drawings and execute the construction. This is particularly important in drawings and specifications related to stairs, special connections for framing, typical details of system interfaces, flashings for roofs and walls, and similar building features.
- (3) Project design is the sole responsibility of the A/E. Specifications that require the contractor to provide engineering design are not acceptable unless the products specified for contractor design are closed engineered systems. Closed-engineered systems include: pre-engineered buildings, manufactured mechanical equipment, prefabricated trusses, precast / prestressed concrete elements and common steel structural bolted connections. Other systems can be defined as closed engineered systems if approved by the DEB Director.
- (4) In order to encourage competition that maximizes the use of public funds, performance specifications defining a desired result or assembly, or referencing recognized standards that define a desired result or assembly, are strongly preferred. If performance specifications are not practical, and a manufactured product must be used to define a desired result or assembly, then three manufacturers with their products or model numbers shall be referenced. The A/E should not reference both manufactured products and performance criteria because conflicts in the performance criteria and the product performance may create unnecessary conflicts. Sole source and proprietary specifications are not allowed without prior written authorization (*Code of Virginia*, § 2.2-4300.C. and 2.2-4303.E).

Understanding and implementing these basic differences in rules and policies may prevent many costly disputes, claims, and resubmittals by the A/E.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

#### SECTION 504.0 A/E BASIC SERVICES

"Basic services" as used in the **Manual** means the application of professional architectural and engineering knowledge, skills, experience and expertise to translate the agency's spacial, functional and adjacency requirements into a facility design described by Plans and Specifications for construction that comply with applicable building codes and **Manual** requirements, are consistent with the Agency's project definition and satisfy the agency's "design-not-to-exceed" budget. After award of a construction contract, "basic services" involve making such reviews, evaluations, inspections, observations, and recommendations as appropriate to assist the Agency in obtaining a constructed facility conforming to the A/E's Plans and Specifications. "Basic services" are usually separated into sequential phases for the purpose of identification and payment.

The A/E shall document in writing summaries of all meetings, direction, guidance, clarifications, site visit observations, field orders and such and provide copies of the documentation to the Owner / Agency and to other participants or attendees as appropriate.

The following generally describes services to be provided during each phase of the project, unless specifically waived:

#### 504.1 Project Initiation, including Schematic Phase

- (1) Consult with the Agency to define, clarify and refine the Agency's requirements for the Project; review available data; confirm the scope of the project and the services required from the A/E; review the "design to" cost; establish the quality of materials, aesthetics desired and other factors pertinent to the project. Some or all of this information should be contained in the Capital Project Request. The Agency should include the user of the facility and the staff responsible for the maintenance of the facility in the project discussions and development of the project criteria and in the review of the A/E's schemes for satisfying the project criteria.
- (2) Identify and analyze requirements of governmental authorities having jurisdiction to approve the design of the project and participate in consultations with such authorities.
- (3) The A/E shall not rely totally on information contained in the "as-built" documents. As part of the required services, it is the A/E's responsibility to verify, by on-site observations of applicable existing buildings, the configurations, locations, dimensions, sizes and conditions accessible for verification. Certain assumptions are made regarding existing conditions in the remodeling and or rehabilitation of an existing building. Some of these assumptions may not be verifiable without additional exploration or investigation of the building or site. To minimize the risk during construction of uncovering conditions that are not as shown on the documents and delaying project progress, the Agency should consider and evaluate the advice of the A/E to conduct additional investigation, verifications or checks to verify assumptions.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- (4) Analyze the Agency's spacial and functional requirements, its required and preferred space adjacencies, its planning surveys, its site evaluations and its comparative studies of prospective sites; provide alternative schemes or solutions for review, approval and/ or selection by the Agency.
- (5) Prior to preparing the Schematic Submittal, submit floor plan and elevation schemes to the Agency and describe how the schemes relate to the space, function, and adjacency requirements in the project criteria.
- (6) Provide a general economic analysis of Agency's requirements applicable to various alternatives.
- (7) Prepare a budget systems cost estimate for the building systems proposed.
- (8) Prepare and submit Schematic material for this phase as described in Chapter 8. (Submittal to DEB may not be required if this information is essentially that which was included in an approved Preplanning Study.)
- (9) Prepare presentation for the Art and Architectural Review Board (AARB) for new construction and for exterior renovations, alterations and rehabilitations of existing buildings; make presentations as necessary to obtain recommendations for approval.
- (10) Prepare materials for presentation to the Department of Historic Resources (DHR) for supportive recommendation on projects involving interior renovation, rehabilitation and/or remodeling of existing buildings and for exterior renovations of existing building.
- (11) Prepare data and pictures of buildings proposed for demolition and assist Agency in obtaining approval recommendations from AARB and DHR.
- (12) Prepare and distribute minutes of project meetings or telephonic discussions summarizing discussions, agreements and direction given or received

#### **504.2** Preliminary Design Phase

After written authorization to proceed with the Preliminary Design Phase, A/E shall:

- (1) In consultation with Agency and based on the accepted study and/or submittal documents and review comments, determine the scope, extent and character of the project. The Agency also shall include review and input from the user of the facility and the staff responsible for the maintenance and operation of the facility in the discussions at this phase.
- (2) Advise Agency if additional data or services are necessary and assist Agency in obtaining such data or services.

#### CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES

- (3) Prepare and submit preliminary design documents as described in Chapter 8 for this phase.
- (4) Prepare furnishing and equipment information floor plans that depict the proposed layout and demonstrate that the required items will fit functionally and spacewise in the rooms.
- (5) Prepare and make presentations to the Art and Architectural Review Board and Department of Historic Resources as may be required for recommendations for approval.
- (6) Prepare and submit a complete systems cost estimate with appropriate backup data. (See Chapter 8 and Appendix E for specific requirements.) In reviewing the estimated construction cost, the Owner should be aware that the A/E has no control over the market price of labor, equipment or materials, or over the Contractor's method of pricing, and that the estimated construction costs provided by the A/E are made on the basis of the A/E's qualifications and experience.
- (7) Participate in the Value Engineering Study as described in Chapter 8. Include described A/E participation as a separate additional service in fee proposal.
- (8) Prepare and submit to the Agency written responses to all reviewing Agencies comments and, if applicable, provide the technical data the Agency may need to substantiate any waiver request required.
- (9) Resolve all outstanding issues, comments from reviewers, and Value Engineering recommendations before proceeding with the Working Drawing Phase.
- (10) Prepare and distribute minutes of project meetings or telephonic discussions summarizing discussions, agreements and direction given or received

Note: The Agency, including the user of the facility and staff responsible for its maintenance and operation should review the preliminary submittal to assure that the spatial, functional and operational requirements have been satisfied. All outstanding issues must be resolved and agreement reached on how to proceed before the A/E is authorized to prepare the Working Drawings. Changes made after authorization to proceed with Working Drawings may subject the Agency to a claim by the A/E for a change in scope or extra services.

#### **504.3** Working Drawings (Construction Documents) Phase

After written authorization to proceed with the final design, A/E shall:

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- (1) On the basis of the accepted Preliminary Design documents, the accepted Value Engineering recommendations, and the review comments as finally resolved, prepare Final Drawings (hereinafter called "Plans") to be included in the Contract Documents showing the complete scope, extent and character of the work to be furnished and performed by Contractor(s). Also prepare Specifications for inclusion in the Contract Documents that conform with the sixteen-division (or seventeen-division, if adopted) format of the Construction Specifications Institute. Specify all finishes and provide color selections of all materials and finishes included in the construction contract. See Chapters 3, 7, 8 and 9 for detailed requirements concerning the Plans and Specifications.
- (2) Provide technical criteria, written descriptions and design data for the Agency's use in filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to approve the design of the Project; assist the Agency in consultations with appropriate authorities.
- (3) Advise the Agency of potential cost overruns, the necessity for unit pricing of any work, the necessity for additive bid items, and assist in preparing and documenting any requests or submittals required.
- (4) Prepare soil and erosion control plans and stormwater management plans for the Agency to submit to appropriate agencies for approval.
- (5) Prepare/update a detailed systems cost estimate with back-up data and submit with working drawing submittal. See Chapter 8 and Appendix E for specific requirements.
- (6) Provide recommendation on number of days estimated for substantial completion of the construction of the project.
- (7) Prepare and submit completed Plans and Specifications and other documents in accordance with the requirements of Chapters 3, 7, 8 and 9 for approval.
- (8) Make any revisions necessary to the Plans and Specifications to be reproduced so that they incorporate resolution and/or correction of all problems raised during review; submit a written response to all review comments to BCOM prior to printing the documents for bidding the project. Do not use the Addendum method to resolve problems or make the corrections required by BCOM comments.
- (9) Assist the Agency in evaluating contractor and/or subcontractor prequalification data if contractors are prequalified for the project.
- (10) Prepare and distribute minutes of project meetings or telephonic discussions summarizing discussions, agreements and direction given or received.

# CONSTRUCTION & PROFESSIONAL SERVICES MANUAL – 2004 CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES

After written authorization to proceed with the Bidding Phase, the A/E shall, unless deleted by the contract or MOU or Change Order:

- (1) Assist the Agency in advertising for and obtaining bid proposals for each separate prime contract, whether for construction, materials, equipment or services. Where applicable, issue Bid Documents, maintain a record of prospective bidders to whom the Bid Documents have been issued, attend pre-bid conferences, and receive and process deposits for Bid Documents.
- (2) Issue addenda, as appropriate, to interpret, clarify or define the requirements of the Bid Documents. Show Project Code and Title on each Addendum. Each Addendum shall bear the A/E seal, signature and date.
- (3) Assist the Agency in determining whether the lowest bidders are responsive and responsible.
- (4) Consult with and advise Agency as to the acceptability of subcontractors, suppliers, other persons or organizations proposed by the low bidder when such acceptability is required by the Bid Documents.
- (5) Requirements for pre-approval of materials proposed by bidders / suppliers are not allowed to be specified. Substitutions are not allowed during the bidding process. The General Conditions of the Construction Contract gives specific procedures for considering substitutions after the contract for construction is awarded. If the A/E determines that other materials are acceptable during the Bid Period, an Addendum shall be issued to modify the specifications and any material that meets the specifications may be provided. "Alternate bid items" are not permitted
- (6) Attend the bid opening, prepare bid tabulation sheets and assist the Agency in evaluating bids or proposals. Make recommendations for awarding contracts for construction, materials, equipment and/or services.
- (7) When the lowest responsive and responsible bid exceeds the budgeted project cost, A/E shall assist the Agency in negotiating with the low bidder, if applicable, and/or modify the bid documents, as appropriate, and assist the Agency in reissuing the IFB. If the Agency is allowed to negotiate with the low bidder to obtain a price acceptable for award of a contract, the A/E shall also prepare the modifications to the drawings, details and specifications to document the changes made to the contract documents.
- (8) Consult with Agency on the acceptability of any substitute materials and equipment proposed by Low Bidder when the Agency is authorized to negotiate with the Low Bidder. The acceptability of a substitute material, equipment or work must be

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

documented on the CO-9b, Bid Modification. (Note: See Chapter 9 and the CO-7 General Conditions of the Construction Contract.)

(9) Receive and inspect Bid Documents returned; issue refunds to bidders, as appropriate.

## 504.5 Construction Phase Services Required to be Performed by the A/E (Submittal Review and Construction Administration Services)

The following services are described in Chapter 10 of the **Manual** and in Section 15 (a) - (h) of the General Conditions of the Construction Contract, G.S. Form E&B CO-7. They shall be provided by the A/E of record as part of Basic Services and shall not be delegated to others unless such delegation has been specifically approved in writing by the Director of the Division of Engineering and Buildings:

- (1) **Consultations:** A/E shall consult with and advise the Agency on all technical matters and act as the agency's representative in dealing with the Contractor on all such matters. The agency's instructions to Contractor(s) will be issued through the A/E, who has authority to act on behalf of Agency to the extent provided in the General Conditions except as otherwise provided in writing.
- (2) **Interpretations and Clarifications**. The A/E shall issue all necessary interpretations and clarifications of the Contract Documents and in connection therewith prepare any necessary field orders and Change Orders.
- (3) **Field and Change Orders:** Issue Field Orders and assist the Agency in preparing and issuing Change Orders. Where the Agency has obtained approval to modify the A/E Contract to reduce the A/E's Construction Phase services, the following shall apply:
  - a. Any matters of a technical nature which affect the integrity of the exterior architectural, structural or fire safety systems or which affect the integrity or operation of the mechanical, plumbing, or electrical systems shall be validated by the A/E before a Field Order or Change Order is issued.
  - b. Field Orders on non-technical matters such as landscaping, finishes, colors, and similar items which do not affect the exterior architectural appearance or the structural, fire safety, mechanical or electrical system integrity may be handled by a qualified licensed professional from the Agency staff or by a licensed professional of the separate contractor engaged to provide such services.
- (4) **Shop Drawings**. The A/E shall review and approve (with or without conditions), reject or take other appropriate action on Shop Drawings and other submittals required of the Contractor. The A/E shall review for conformance with the Project design concept and compliance with the information given in the Contract Documents. Such reviews and approvals or other action shall not extend to means, methods, techniques,

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

sequences or construction procedures or safety precautions and programs incident thereto. See General Conditions Section 24.

- (5) **Equals**. The A/E shall evaluate and determine the acceptability of any equal materials or equipment proposed by Contractor. See General Conditions Section 26.
- (6) **Structural and Special Inspections**: The A/E shall provide the services described in Chapter 10 of the **Manual** relating to proper installation of structural systems on the project, including the review of applicable inspection and test reports by the agency's Testing and Inspection entity.
- (7) **Disputes between Agency and Contractor.** The A/E shall act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and shall make recommendations to the Agency on all Contractor claims relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work.

## 504.6 Construction Visits, Inspection and Closeout Services to be Performed by the A/E or by the Agency Project Management and Inspection Entity

The following construction period services described in Chapter 10 of the Manual and in the General Conditions of the Construction Contract, CO-7 shall also be provided by the A/E as part of its Basic Services unless specifically deleted in the A/E Contract or its MOU and delegated by the Agency to its Project Inspector or separate Construction Administrator entities. (Note: When the service(s) has been delegated to other than the A/E, the description below applies to the person or entity to whom it has been delegated.)

- (1) **Visits to Site and Observation of Construction**. An A/E representative who is knowledgeable of the project and competent in each discipline which has trade activities and stages of construction being performed shall visit the site at intervals to observe as an experienced and qualified design professional the progress and quality of the various aspects of the contractor's work. Based on information obtained during such visits and on such observations, the A/E shall endeavor to determine whether such work is proceeding in accordance with the Contract Documents and shall keep the Agency informed of the general progress of the work in relation to the overall schedule. Document in writing.
- (2) **Inspections of Work in progress by the A/E**. During his periodic visits to the Site to observe the work in progress, the A/E (accompanied by the Project Inspector) shall, as a minimum, spot check the work installed and the work in progress to determine compliance with the requirements of the Contract Documents and the codes and installation/workmanship standards listed therein (e.g. clearances and lap lengths for reinforcing bars per ACI; duct construction and installation conforming to SMACNA; pipe support terminals conforming to Code; wiring installation, anchorage and terminations conforming to NEC; and such). Defective and noncompliant work shall

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

be noted in the A/E's inspection report and pointed out to the Project Inspector and Contractor. The A/E shall identify for the project inspector any specific checks or inspections to be made. The results of these inspections shall be made a part of the Project inspector's Daily Report. Document in writing.

- (3) **Supplemental Inspections and Tests**. For Work not in compliance with the Contract Documents, the A/E shall, with the agency's approval, require additional or supplemental inspection or testing. The A/E shall receive and review all certificates of inspections, tests and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents and shall determine whether their content complies with the requirements of each. The A/E shall also determine whether the results certified indicate compliance with the Contract Documents. Document in writing.
- (4) **Defective Work**. During its monthly site visits and based on its observation during such visits, the A/E may disapprove or reject Contractor(s)'s work, or any portion thereof, while the work is in progress if A/E believes that such work does not conform to the Contract Documents, including the approved shop drawings or other submittals. The A/E may also recommend that the Agency reject any work which it believes will not result in a completed Project that conforms generally to the Contract Documents or that it believes will prejudice the integrity of the design as reflected in the Contract Documents. Document in writing.
- (5) Contractor Applications for Payment (G.S. Form E&B CO-12). Based on the A/E's on-site observations as an experienced and qualified design professional, information provided by the agency's Project Inspector and review of applications for payment and the accompanying data and schedules, the A/E shall determine the amounts due to Contractor(s) and recommend in writing payments to the Contractor(s). Such recommendations will constitute a representation to Agency, based on such observations and review, that the work has progressed to the point indicated and that to the best of the A/E's present knowledge, information and belief, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents and any other qualifications stated in the recommendation). In the case of unit price work, the A/E's recommendations for payment will include final determinations of quantities and classifications of such work subject to any subsequent adjustments allowed by the Contract Documents and approved by DEB.
- (6) **Substantial Completion Inspection** Prior to scheduling a substantial completion inspection, the A/E shall verify that the project is, in fact, ready for such an inspection as described in Chapter 10 and advise the Agency in writing of same. At a minimum, the A/E's licensed professional architect, mechanical engineer, and electrical engineer shall be present at the substantial completion inspection unless absent on an express written waiver by the Agency.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- (7) **Final Completion Inspection** The A/E shall conduct a final inspection to determine if the completed work is acceptable. The A/E shall notify the Agency in time to allow Agency and DEB representatives to participate in the inspections. If the Final Completion Inspection is successful, the A/E may recommend, in writing, final payment to Contractor(s) and give written notice to the Agency and the Contractor(s) that the work is acceptable. The A/E may, however, accept some portions of the Work and reject others or may accept some or all of the Work subject to certain conditions. Written notice shall be provided to the Agency and Contractor of the results of such inspections.
- (8) Contractor's Completion Documents. The A/E shall receive and review maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals which are to be assembled by Contractor(s) in accordance with the Contract Documents and shall transmit them to the Agency with written comments. The A/E shall receive the As built drawing mark-ups required from the Contractor and transfer data to and prepare the Record Drawings. Obtain and submit microfilm of Record Drawings
- (9) **Project Closeout**. A/E shall provide project closeout services as outlined in Chapter 10.
- (10) **Other:** The A/E shall perform all duties described in or reasonably implied by Chapter 10 of the **Manual**, the Construction Contract, including the Plans and Specifications and the General Conditions of the Construction Contract.

#### SECTION 505.0 WORK NOT INCLUDED IN THE SCOPE OF BASIC A/E SERVICES

The following services are not considered to be included in the A/E's Basic Services. If any of these services are included in the A/E's Contract, they shall be set out separately with fees negotiated and included in the total fixed fee in the Contract. If requested in writing after negotiation of the Contract, they shall constitute extra services as described in Chapter 6 and shall be negotiated and authorized by Change Order to the A/E Contract using G.S. Form E&B CO-11a/e.

- **505.1** When, after approval of any stage of the design, it is determined that a substantial change in the overall scheme is advisable, and such change is ordered by the Agency with the authority of the Governor, the fixed fee amount for the additional work shall be agreed upon and added to the A/E contract by Change Order.
- 505.2 When the A/E is directed to prepare applications and supporting documents for Federal government grants, loans, or advances, the fixed fee amount for the additional work shall be agreed upon and added to the A/E contract by Change Order.

#### CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES

- 505.3 When the agency authorizes or directs the A/E to provide information or data which is normally the agency's responsibility, as described in Section 501, the fixed fee amount for the additional work shall be agreed upon and included in the initial contract as extra services or added to the A/E contract by Change Order.
- 505.4 When the Agency requests changes to drawings and specifications after the work are under construction, the fixed fee amount for the additional work shall be agreed upon and added to the A/E contract by Change Order.
- **505.5** When delinquency, insolvency or failure of the Contractor to perform the Work requires extraordinary demands on the time of the A/E and the A/E has not contributed to such delays, the Agency may consider compensating the A/E for some portion of the time where documented and justified.
- 505.6 When extra work is required as a result of damage by fire, unforeseen structural conditions, or other causes beyond the control of the A/E, the fixed fee amount for the additional work shall be agreed upon and added to the A/E contract by Change Order.
- 505.7 When the Substantial Completion of construction is delayed beyond the Contract Completion Date for more than 30 days by the Contractor or the Agency and through no fault of the A/E, the A/E may be entitled to additional compensation for authorized additional periodic site visits / inspections necessitated by the delay. Requests for such compensation shall include documentation naming the person(s) making the additional visit, date(s), time(s), etc. as may be required by the Agency.
- **505.8** When unforeseen conditions require special or continuous on-site services for an approved period of time, such special or continuous on-site services must be requested and approved in writing by the Agency in advance.
- **505.9** When the A/E is directed to prepare, document and submit an Environmental Impact Study or Report, the fixed fee amount for the additional work shall be agreed upon and added to the A/E contract by Change Order.
- **505.10** If the Agency decides after execution of the A/E Contract that prequalification of contractors and/or subcontractors is required, the services required of the A/E to assist in evaluating the prequalification data will be considered extra services and a fee for same shall be negotiated prior to the A/E performing the work.
- **505.11** If the A/E is required to participate in the Value Engineering Study as described in Chapter 8, the A/E's participation fee should be included as an additional service in the project fee negotiation.

#### CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES

The Agency and the A/E shall note the 11-digit project identifier (3-digit agency code, 5-digit project code, & 3-digit subproject code) on **all** project documents, correspondence, memoranda, invoices, submittals and other related material. The A/E shall require that the 11-digit project identifier is shown on all submittals, correspondence, and other documents generated by contractors, subcontractors, suppliers, consultants, testing entities or others associated with the project. If a project is not subdivided into sub-projects, use "000" as the subproject code, otherwise use the applicable subproject code.

An example of the format to be used is: 999-99999-999

### SECTION 507.0 INTERIOR DESIGN SERVICES FOR FURNITURE, FURNISHINGS AND DECORATIONS FOR BUILDING PROJECTS

#### 507.1 General

The Basic Services of the A/E for a project require the A/E to provide informational floor plans which use basic template outlines to show that the required furniture will fit in the rooms or spaces. (See Section 504.2 above.) The A/E is also required to specify all building materials and finishes and to select the colors for all building components which the building contractor is required to provide and/or install. (See Section 504.3 above.)

Note: Agencies must pay particular attention to the Commonwealth's definition of "Basic Services" and what is included versus the definition of Interior design used in the private sector and the AIA standard contracts. Do not use standard AIA Contracts or AIA definitions of Basic/Additional Services.

This section discusses requirements for the additional services or separate contract for Interior Design services for the selection, specification, and procurement of furniture and furnishings that are not a part of the A/E's Basic Services as defined by the **Manual**. A scope of services shall be determined and a fee negotiated for the interior design services described hereafter. These furnishings or furniture items are often procured by the Agency through the Division of Purchases and Supply (DPS) or through the Agency procurement office.

#### **507.2** Scope

Examples of the scope of work for Interior Design services for furniture, furnishings and decorations when procured as an A/E additional service or as a separate contract are listed below. The person providing these services is referred to herein as the Interior Designer.

**507.2.1** Selection of furniture, furnishings, and accessories including but not limited to sofas, chairs, tables, screens, planters, art work, carpets, draperies, etc. Most items are available on and should, if possible, be selected through DPS from state contracts.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

- If the items are available on state contract, the Interior Designer will recommend the proper item and color, fabric, finish, etc. for the Agency to procure.
- If the items available on state contract are considered acceptable for the particular application, the Interior Designer will prepare written justifications for the Agency stating why items available on state contracts are not suitable. If procurement of the items off state contract is approved, the Interior Designer will prepare adequate specifications and other data necessary for Agency procurement.
- If the items are not available on state contract, the Interior Designer will prepare adequate specifications and other data necessary for Agency procurement.
- 507.2.2 The Interior Designer shall select and coordinate all colors, fabrics, etc., with the colors of the building finishes. Although building finishes are selected by the A/E during design and finalized during the review of Contractor submittals, the Interior Designer shall verify actual Contractor applied finishes through on-site verification and/or coordination with the Agency Project Manager.
- 507.2.3 The Interior Designer shall prepare presentation boards of a minimum size of 15 x 20 inches to show furniture placement plans, catalog cutouts of furniture, furnishings and accessories, color samples, material swatches of draperies, carpets and fabrics.
- **507.2.4** The Interior Designer shall prepare a minimum of three interior design 8-1/2 x 11 inch binders/packages with accompanying floor plan sheets and deliver to the Agency Project Manager. These binders/packages shall include but are not limited to:
  - (1) Floor plans at 1/4" = 1'- 0" or larger scale indicating locations of all furniture, furnishings and accessories. These items should be identified with an item number keyed to the presentation boards and the furniture procurement list.
  - (2) Procurement lists identifying all items to be purchased by model number, contract number (for state contracts), identification number and description (for non-state contract items), quantity, price, etc. Care shall be taken in the selection of all items to ensure that delivery times are reasonably within the agency's schedule and state contracts, if applicable, will not be expired at the time of purchase.
  - (3) Photographic color reproduction or color copies of the presentation boards reduced to fit 8-1/2 x 11 inch binder or package.
  - (4) Specifications, drawings and other supporting data for standard procurement and special order items (draperies, custom-built screens or dividers, art work, etc.)
- **507.2.5** The Interior Designer shall advise, as needed, when changes must be made as a result of changes in requirements, non-availability of items or materials previously selected, etc.

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

**507.2.6** The Interior Designer shall provide placement sheets for each room/area, listing each item of furniture or equipment that will go into the area.

#### SECTION 508.0 A/E PERFORMANCE EVALUATION

The Agency will evaluate the A/E's performance of the design phase services, including preparation of drawings and specifications, and prepare a G.S. Form E&B CO-8b, Opinion of A/E's Performance (Design Phase), using the current edition posted on the Forms Center and indicating its opinion of the A/E's performance. This evaluation includes a rating of the services performed in such categories as economy and suitability of design, overall engineering quality, adequacy of details and specifications, adherence to schedules and scope, consciousness of budget, responsiveness, and cooperation. The Agency shall provide a copy of the completed C0-8b to the A/E when completed. If the A/E wishes to comment on either evaluation, dispute any part of the evaluation or offer its side of the issue, the A/E may submit a response to the agency (with a copy to BCOM). The A/E's response shall be attached to and made a part of the Agency evaluation form for future reference.

The Agency shall also submit a completed copy of the C0-8b electronically to BCOM at the time of award of the construction contract.

Upon completion of the construction contract, an evaluation of the A/E's performance during construction, G.S. Form E&B CO-14a, Opinion of A/E Performance (Construction Phase) using the current edition posted on the Forms Center and shall be completed by the Agency Project Manager and Project Inspector. The evaluation will emphasize the evaluator's opinion of the quality and constructability of the design, timeliness and response with respect to shop drawing review, clarification of drawings/specifications intent, resolution of construction problems, and cooperation. The Agency shall provide a copy of this evaluation to BCOM and the A/E. If the A/E wishes to comment on either evaluation, dispute any part of the evaluation or offer its side of the issue, the A/E may submit a response to the agency (with a copy to BCOM). The A/E's response shall be attached to and made a part of the Agency evaluation form for future reference.

The completed CO-8a and CO-14a evaluations (along with attachments and A/E responses, if any) are considered Confidential information equivalent to the A/E's 'personnel records' for the A/E performance of work for the Commonwealth and shall be subject to the same protections. The completed evaluations shall be retained in the A/E's performance file at the Agency for review and consideration by future A/E selection panels. The completed A/E evaluation forms may be shared by the custodian with other state agencies for the purpose of "references" to assist in state agency selection panels in evaluating the A/E during the selection process.

Upon completion of the construction contract, the A/E shall complete an evaluation of the Contractor's performance during construction, G.S. Form E&B CO-14b, Opinion of Contractor's Performance using the current edition posted on the Forms Center. An Evaluation shall be completed by the Agency Project Manager and Project Inspector. The evaluation will emphasize the evaluator's opinion of the quality and construction, timeliness of the work and conformance with the project schedule, and timeliness of shop drawing submittals, number and validity of contractor requests for

#### **CHAPTER 5: BASIC SERVICES AND RESPONSIBILITIES**

clarification of drawings/specifications intent, resolution of construction problems, and cooperation. The A/E and Agency may also complete CO-14b evaluations on any individual Subcontractor performing work on the project to note above average or below average or poor performance by a particular subcontractor or supplier. The Agency shall provide a copy of this evaluation to BCOM and the Contractor. If the Contractor wishes to comment on either evaluation, dispute any part of the evaluation or offer its side of the issue, the Contractor may submit a response to the Agency (with a copy to BCOM). The Contractor's response shall be attached to and made a part of the Agency evaluation form for future reference.